cPCI-7230
16-CH Isolated DI & 16-CH Isolated DO Module

Features

- 3U Eurocard form factor, CompactPCI compliant (PICMG 2.0 R2.1)
- 16-CH isolated digital inputs and 16-CH isolated digital outputs
- Non-polarity digital input range
- 5000 V_{RMS} optical isolation
- Sink current up to 500mA on each isolated output
- Isolated input voltage up to 24 V
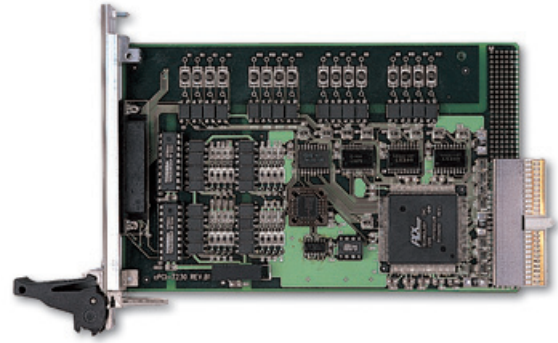- Two external interrupt sources

- **Operating Systems**
  - Windows 98/NT/2000/XP/2003
  - Linux
  - DOS
  - Windows CE (call for availability)

- **Recommended Software**
  - VB/VC++/BCB/Delphi
  - DAQBench

- **Driver Support**
  - DAQ-LVIEW PnP for LabVIEW
  - DAQ-MTLB for MATLAB
  - DAQBOY for Windows
  - PCIS-DASK for Windows
  - PCIS-DASK/X for Linux

Introduction

ADLINK cPCI-7230 is a 16-CH isolated digital input and 16-CH isolated digital output module for PXI/CompactPCI form factor. The device provides a robust 5,000 V_{RMS} isolation protection which is suitable for most industrial applications. The wide input range makes the cPCI-7230 easy to sense the status of external devices. A potential difference of 3 to 24 V between two input terminals is logic high. Logic low is between 0 to 1 V. The device features a wide output range from 5 to 35 V, suitable for relay driving and industrial automation applications. It also provides two interrupt sources on digital input channels, which are easily user configurable.

Specifications

Isolated Digital Input
- Number of channels:
  16 (IDI0-7 have individual connections and IDI8-15 share a common connection.)
- Maximum input range: 24 V, non-polarity
- Digital logic levels
  - 0-24V, non-polarity
    - Input high voltage: 3-24 V
    - Input low voltage: 0-1 V
- Input Resistance: 1.2 kΩ @ 0.5 W
- Isolation voltage: 5000 V_{RMS}
- Interrupt sources: digital input channel 0 and 1
- Data transfers: programmed I/O

Isolated Digital Output
- Number of channels: 16
- Output type: open collector Darlington transistor
- Sink current
  - 500 mA for one channel @ 100% duty
  - 500 mA for all channels @ 20% duty
- Power dissipation
  Max. 2.25 W per chip (8 DO channels)
- Supply voltage: 5-35 V_{DC}
- Isolation voltage: 5000 V_{RMS}
- Data transfers: programmed I/O

General Specifications
- I/O connector: 50-pin SCSI-II female
- Operating temperature: 0 to 60˚C
- Storage temperature: -20 to 80˚C
- Relative humidity: 5 to 95%, noncondensing
- Power requirements

Device	+5 V
cPCI-7230	270 mA typical

- Dimensions (not including connectors)
  160 mm x 100 mm

Termination Boards
- **DIN-50S**
  Termination Board with a 50-pin SCSI-II Connector and DIN-Rail Mounting (Including One 1-meter ACL-10250 Cable)

Pin Assignment

VDD	1	26	VDD
EOGND	2	27	EOGND
EOGND	3	28	EOGND
EOGND	4	29	EOGND
IDO_7	5	30	IDO_14
IDO_6	6	31	IDO_15
IDO_5	7	32	IDO_12
IDO_4	8	33	IDO_13
IDO_3	9	34	IDO_10
IDO_2	10	35	IDO_11
IDO_1	11	36	IDO_8
IDO_0	12	37	IDO_9
IDI_3H	13	38	IDI_7L
IDI_3L	14	39	IDI_7H
IDI_2H	15	40	IDI_6L
IDI_2L	16	41	IDI_6H
IDI_1H	17	42	IDI_5L
IDI_1L	18	43	IDI_5H
IDI_0H	19	44	IDI_4L
IDI_0L	20	45	IDI_4H
IDI_11	21	46	IDI_15
IDI_10	22	47	IDI_14
IDI_9	23	48	IDI_13
IDI_8	24	49	IDI_12
EICOM	25	50	EICOM

Ordering Information
- **cPCI-7230**
  16-CH Isolated DI & 16-CH Isolated DO Module

1 Software Solutions
2 PXI/ CompactPCI Platforms
3 PXI-Based Instruments
4 PXI/ CompactPCI Modules
5 PCI DAQ Cards
6 PCI DIO Cards
7 PC/104-Plus Products
8 ISA DAS/ DIO Cards
9 Wiring Termination Boards
10 Motion Vision & COM
11 Remote I/O Modules
12 Industrial Computers